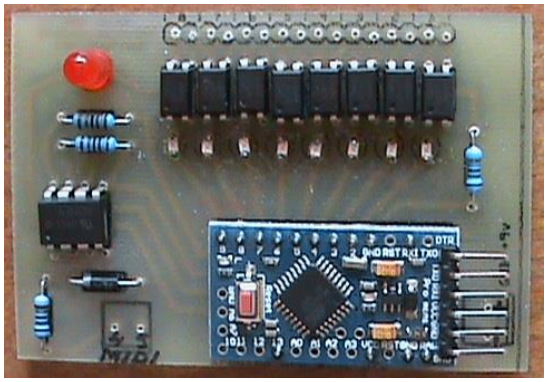
ROLAND GR-55 GUITAR SYNTHESISER

MIDI AudioPlayer Interface



Build-In Manual

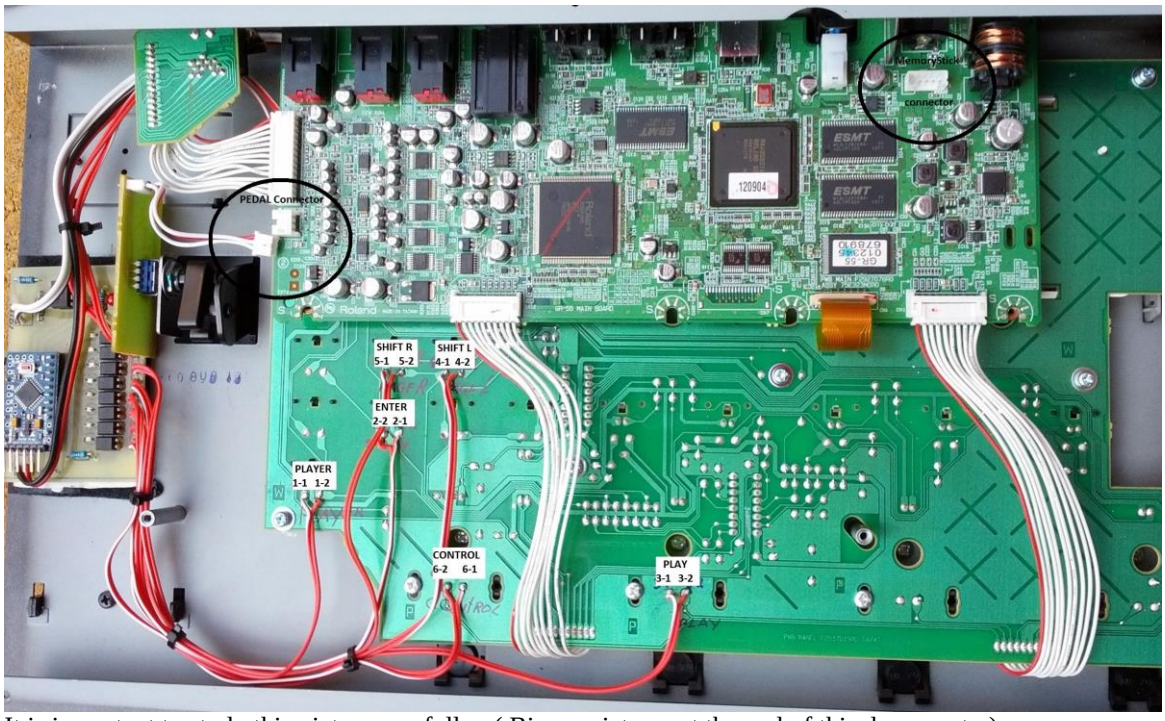
(QUICK REFERENCE GUIDE)

Geer Assink, August 2015, The Netherlands

Congratulations on the purchase of your AudioPlayer Midi interface for your Roland GR55.
This document is a quick guideline , to help you to build the ad-on into your GR55.
A detailed movie is available.

Some advice: do not do this job in a hurry, take your time. You will be needing at least 3 hours.

This first a picture is a picture of the GR55 and the already build in Ad-On with labelled connections.



It is important to study this picture carefully. (Bigger pictures at the end of this document.)
Connecting the wires wrongly, will result in a not functioning control. Connecting the power wire the wrong way may even result in damaging your Ad-On. Your GR55 can not be damaged by connecting the wires wrongly.

You need:
Transparent tape, Double sided tape, Solder and small tie-ribs

Tools
Soldering Iron, Scissors, Phillips screwdriver,

Wire
1 to 6 30cm/12 inch bicolour thin wire
Midi 30cm/12 inch bicolour thin wire (other bicolours)
Power 50 cm/16 inch red/black thin speaker cable
(You can use any twin wire you want, bicolour is to prevent connecting mistakes)

Wire Labels

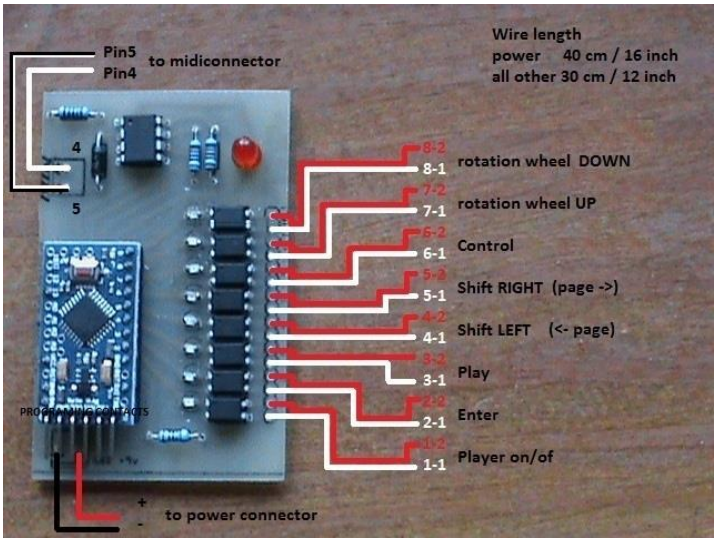
1-Player 2-Enter 3-Play 4-Shift L, 5-Shift R 6-Control 7-Wheel UP 8-Wheel down

Printed Circuit Board (PCB) labels:

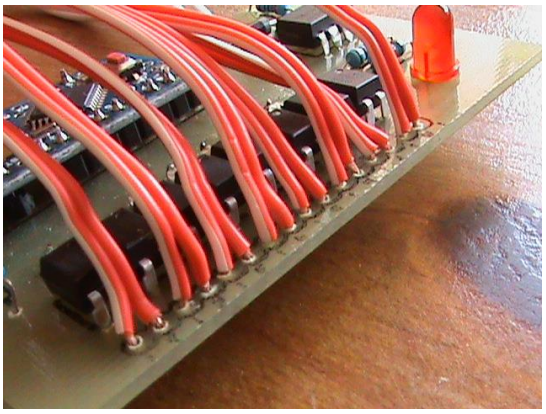
Player	Enter	Play	Shift L,	Shift R	Control	7-1Wheel UP
1-1 1-2	2-2 2-1	3-1 3-2	4-1 4-2	5-1 5-2	6-2 6-1	/ 7-1 \
						\ 8-1 /
						8-2 Wheel down.

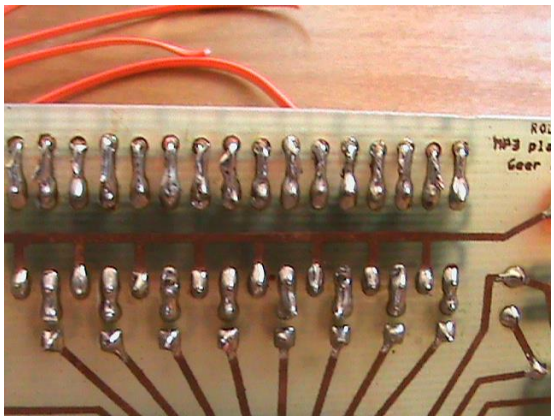
I strongly advice you to print and cut out these labels (or make your own) and tape them to the end of the wires and on the PCB's.

2. Connect the wires to your Ad-On according to the picture. Notice how they are numbered.



Please check if all the wires are soldered in the correct way and have the correct label.

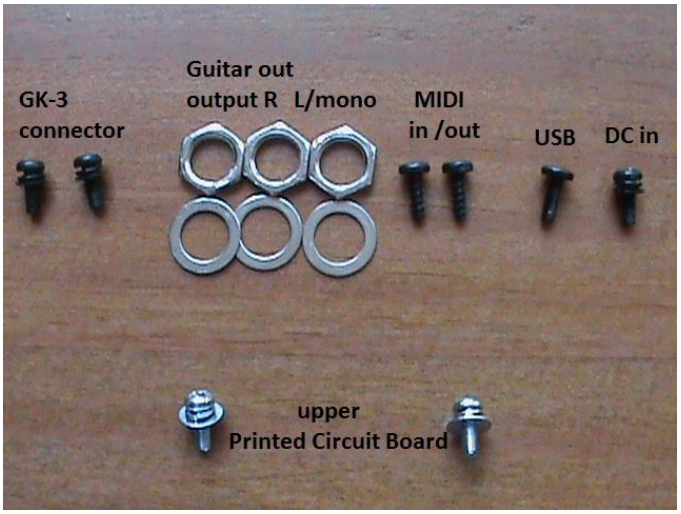




Next, check that there are no unwanted solder bridges between the solder contacts.

3. Put your GR55 in front of you an place it upside down.

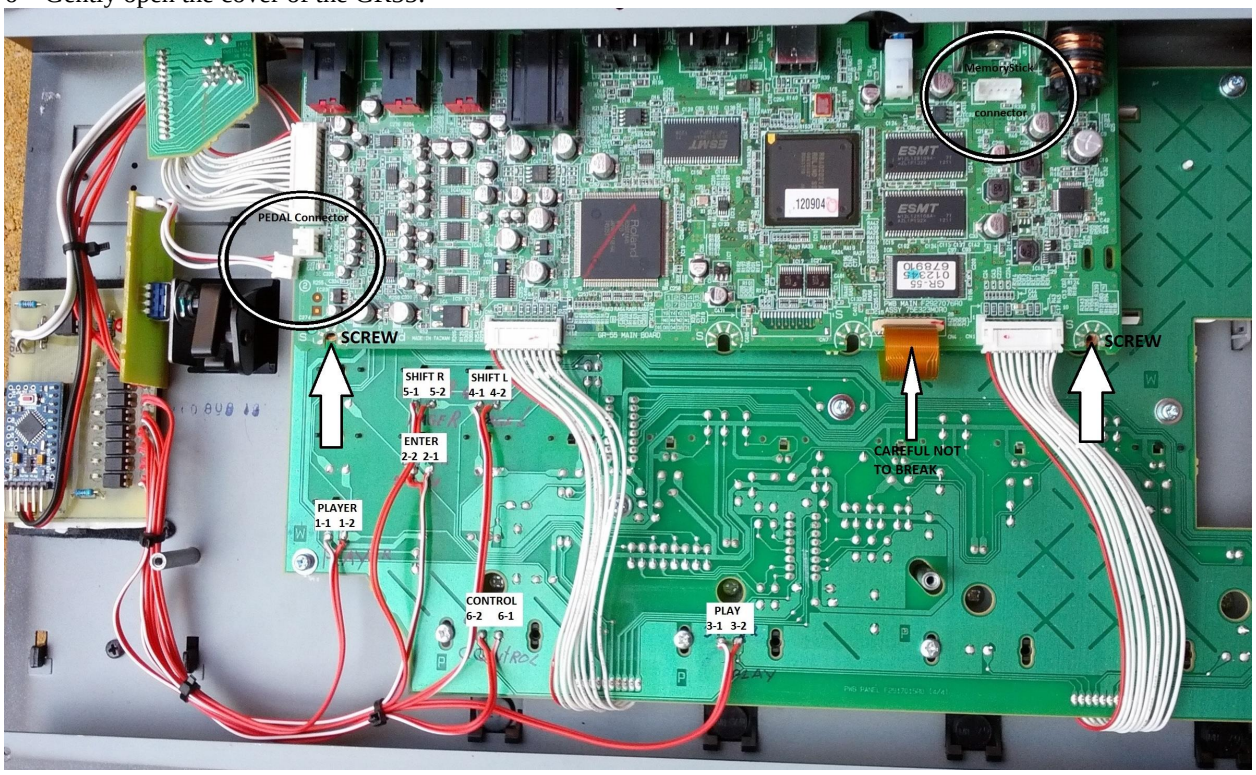
4. Remove the 8 screws on the back of the GR55 and put then in a save place.



5. Remove the screws and nuts of the connectors on the back of your GR55 and notice that they are different.

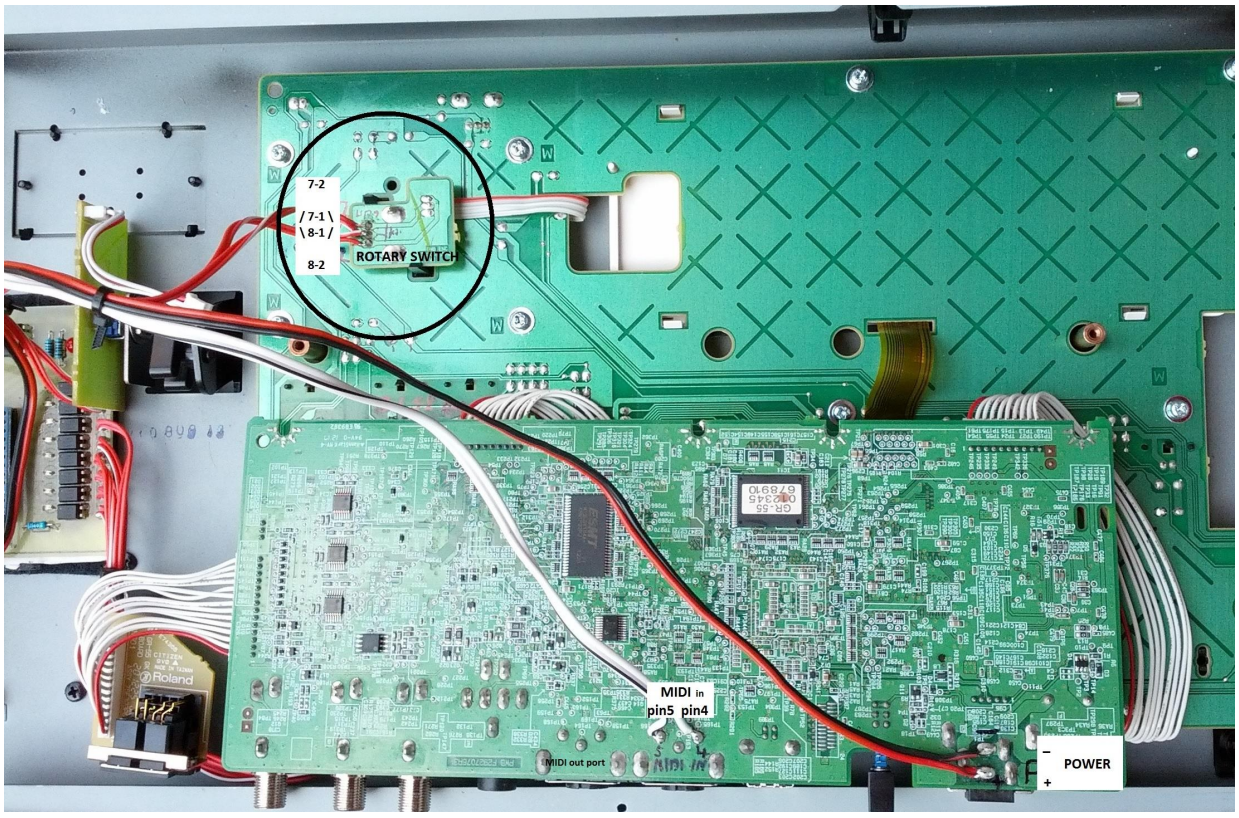
(DC-IN and GK-3 are the same)

6 Gently open the cover of the GR55.



7. Disconnect the connector of the USB port (Memory stick)by wiggling it upwards.
8. Disconnect the paddle connector.
9 Remove the screws on the bottom corners of the upper Printed Circuit Board (PCB)
10. Now pull the board a little towards you and flip it over.

Be gentle and careful with the brown/orange printed wire strip. Just do not bend or pull on it with force.



10 Guide wire 7, 8, Power an Midi to the north and bind them with a tie-rib.

11 Guide wire 1 to 6 to the south an bind them witch a tie-rib.

12. Put your Ad-On in its place and secure it with, glue, tape or/and 'Burs Tape' or hot-glue.
Make sure that there is no electric contact between the Ad-On and the body of the GR55.

13. Use some transparent tape to put the PCB labels on the right spot on the PCB's or just write it on the PCB with a Sharpie. (can be removed by using acetone)

Connecting the wires

Find the correct solder spot. Find the corresponding wire and label. Cut the wire to the desired length. Strip the ends of the wire and solder it. Cut of the excess of the tined wire. Heat up the connecting solder spot on the GR55 PCB. Put a little bit extra solder to it. Stick the soldered end in the liquid solder of the heated connection. Lift your solder iron. DONE!

Solder the rest of the wires to your GR55 PCB's according to the pictures.

POWER

MIDI

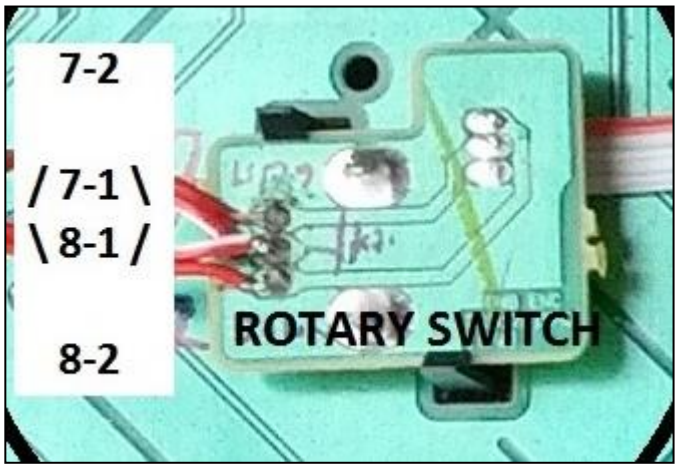
Rotary Switch

Number 7-2 goes to the top (UP),

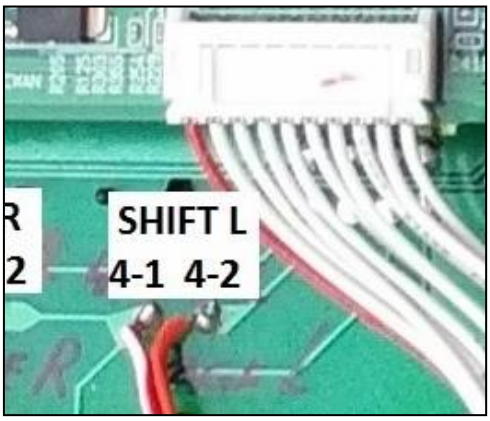
Number 7-1 and 8-1 are soldered together.

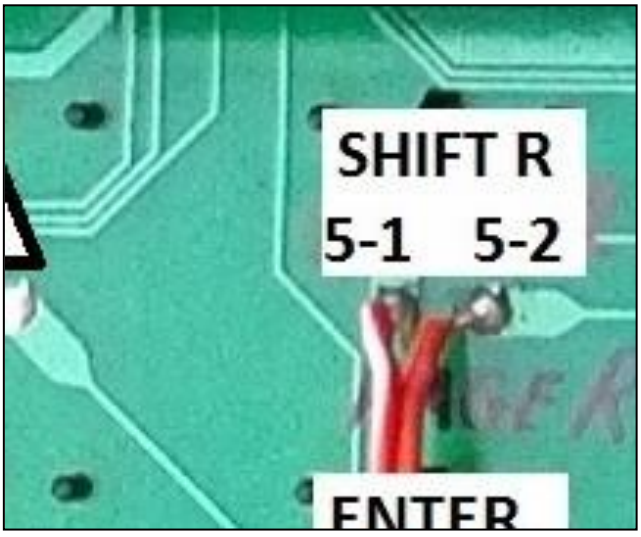
Number 8-2 goes to the bottom (DOWN).

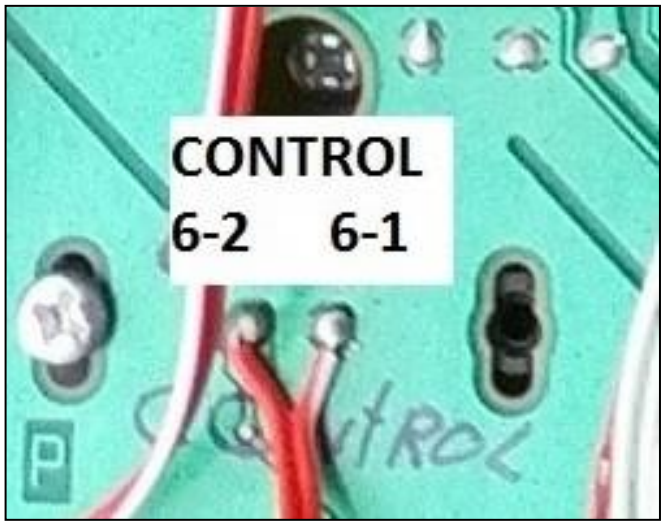
Make sure the are no unwanted solder bridges!



Now flip the upper PCB board back in place and continue with the wires 1 to 6,







Testing your Ad-On

*** CHECK ALL THE CONNECTIONS TWICE ON POLARISATION AND SOLDER BRIDGES ***

- Put the screws of the upper PCB back in place!.
- Connect the paddle connector. (Only one way to put it in, don't use force)
- Put the screws of the GK-3 connector back in place.
- Put the cover above your GR55 and connect the USB connector. (Only one way to put it in, don't use force)

- Connect an Midi interface to your iPad. (Alesis , ESI nTour or some other midi interface)

- Plug the "Midi Out" of the interface into the "Midi In" connection of the GR55.

- Switch on your GR55. The red led on the Ad-On computer should light up.
  If not, switch of the power and check the power wire. Is it connected the wrong way? Check power wire connection on the Ad-On and on the GR55 PCB for solder bridges.

- Start 'MidiDesigner' with my 'GR55 template' (or some other midi app your using) and check if MidiDesigner is connected to the midi interface. (push 'MORE' 'CONFIG' tab 'CONNECTIONS')

- Start pushing some AudioPlayer buttons on the iPad. You should see the corresponding BLUE led lighting on the Ad-On.

  PS: The Ad-On reacts on any ControlChange(CC) command on midi channel 16 with an blink of the red led. CC 90 to CC127 are used to control the switches on your Ad-On. See tutorial in the GR55 template.

- If not, only the midi wire can be connected the wrong way.
- If you tested all the player commands (including the 'SONG' commands), Close the cover of the GR55 an flip it over to see the GR55 display.

- Start pushing the Player buttons in the correct order. If your GR55 does not react the right way , try the corresponding button on the GR55.

- GR55 button is okee. : Wire connected the wrong way
- GR55 button does not respond : There must be an unwanted solder bridge on the Ad-On or on the GR55

- If it al works correctly, switch of your GR55, put al the screws back in and enjoy the GR55 as much as I do.

HAPPY PLAYING !

G Assink
August 2015,
The Netherlands.
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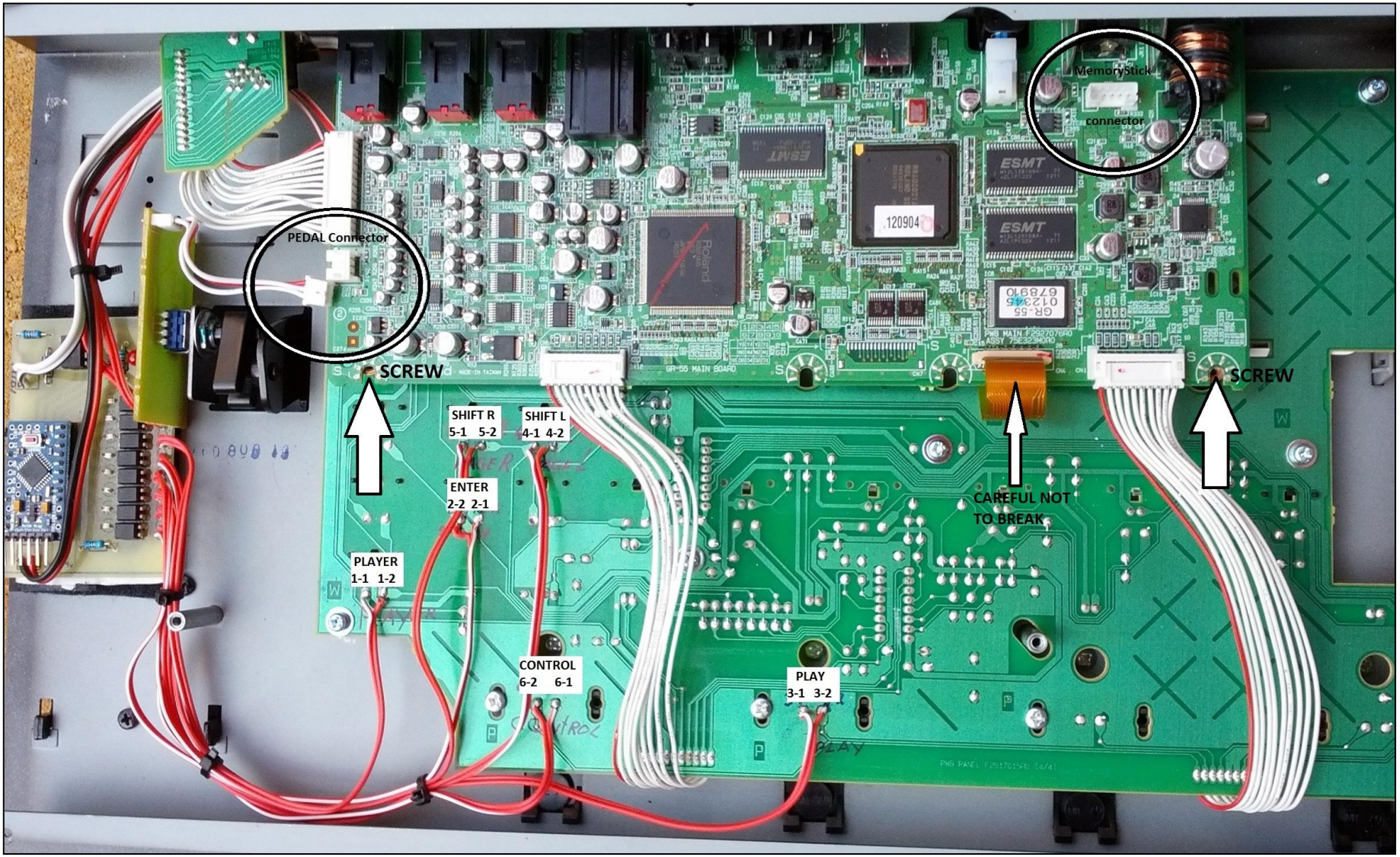
Inside GR55 1



Inside GR55 2